

REMARKS:

Claims 1-36 are pending, of which claims 32-36 are added herein. The Office Action dated July 29, 2005 rejected claims 1, 6-11, 16-20, 21-23, and 25-27 under 35 USC 103(a) over Tada (6,662,105) in view of Otting (6,477,372) and Fumarolo (6,366,782). Claims 2-5, 12-15, and 24 have been rejected under 35 USC 103(a) over Tada, Otting and Fumarolo in further view of Dennisson (6,324,404); and claims 28-31 have been rejected as obvious over Tada, Otting, Fumarolo and Dennison in further view of Inoue (6,634,284).

Claims 1, 11, 21 and 27 are independent, each amended to recite that the map associates, for at least one desired communication system, different geographical areas with different communication system selection parameters. Support for this change is at page 8, lines 1-13, and Figures 2-5 of the application. Claims 1 and 11 are further amended to recite wirelessly searching for the desired communication system using the derived (at least one) system selection parameter. Support for this element may be found at page 8, lines 25-29 of the written description. The written description makes clear that different communication systems operate using different selection parameters in different areas (e.g., different protocols, frequency bands, license blocks, or channels). Claim 11 is further amended to recite in the preamble a mobile station rather than a communication system. Changes to claims 2-4, 12-20, and 29 are to recite proper antecedent basis given the changes to the independent claims, and claim 19 is additionally recited to clarify antecedent basis given that claim 11 from which it depends is amended to recite a mobile station in the preamble. Support for new claims 32-35 may be found in the overlapping coverage areas of Figure 4B. Support new claim 36 lies in claims 27 and claim 1, with the notice that claim 36 reads on a data and/or a voice network.

All rejections rely on the combination of Tada with Otting, so their teachings are briefly reviewed. Tada is directed to a navigation device, where a map database is maintained at the device (vehicle) and route guidance data is sent wirelessly to the device from an information center IC (col. 2, lines 3-13). A search selection device within the Tada navigation device

selects whether to use route data from the (internal) map database or from the (external) IC (col. 2, lines 20-31). The map data storing section of the navigation device is a DVD (col. 6, lines 50-51), and the current position data system is GPS (col. 6, lines 58-59). The search selection device of Tada is described as within the processing section of the navigation device (col. 2, lines 13-15), and is termed in Fig. 1 a route search location determining section 12d of the mobile body 10 (col. 8, lines 32-40). Because only map and route data passes between the mobile body 10 and the IC 30 for display of the selected route at the navigation device (col. 8, lines 39-41), Tada is not seen to exchange voice data. It has been previously argued that to modify Tada to use voice data would render the modified Tada navigation device unsatisfactory for its intended purpose, and would change the Tada principle of operation (col. 1, lines 7-10, 30-32, and line 66 to col. 2, line 2). See MPEP 2143. Those arguments are re-asserted by reference to the RCE dated July 13, 2005.

Otting relates to an alternate technology scan procedure that enables controllable interruptions to a system on which a radiotelephone is presently camped (col. 2, lines 36-39), such as between GSM pages (col. 2, lines 43-46). The referenced Office Action concedes that Tada fails to teach or suggest deriving at least one communication system selection parameter from a mobile station's location by which the mobile station may obtain access to a desired communication system. For this claim element, the Office Action cites Otting at col. 3, line 45 to col. 4, line 59. The Office action further concedes that Tada and Otting fail to teach sending voice data from the mobile station through the communication system, for which Fumarolo is asserted at col. 4, line 39 to col. 5, line 20 as teaching automatically relaying "additional detail information that is not included in displaying the location of mobile user in case of emergency ..."

As previously argued, Tada alone or in combination with Otting fails to teach or suggest "deriving at least one communication system selection parameter from the mobile station's location relative to the map by which the mobile station may obtain access to a desired communication system" as recited in claim 1 and similarly in each independent claim. The added element of claims 1 and 11, "wirelessly searching for the desired communication

system using the derived at least one system selection parameter”, is seen to make this distinction more clear. Tada *presumes* a link to the IC, and using a parameter from Otting in the asserted combination does NOT result in “deriving [the communication system selection parameter] from the mobile station’s location relative to the map” as recited in each independent claim. Tada, Otting, and Fumarolo are not seen to derive a communication system selection parameter from the mobile station’s location relative to the map. Tada selects which database, internal to the vehicle or within the accessed information center, is used for route searching and route guidance data. Tada, abstract and col. 2 lines 3-19. Modifying Tada with Otting does not convert the cartographic maps (of the vehicle or IC) of Tada to maps from which a communication system selection parameter may be derived.

The extent of Otting’s teachings regarding geographic areas is seen to be that each radiotelephone system, the one on which Otting’s radiotelephone is camped and the one for which it performs background scanning, provide services to the geographic area where the radiotelephone is located. (Otting, abstract.) No teaching as to associating a communication system selection parameter with a geographic area is seen, and particularly not storing such an association in a mobile station. Whereas the Office Action recites this as old, asserting that Otting teaches that a radiotelephone “scans for alternate technology to select the desired one *typically according to the location of the mobile*” (emphasis added), no such teaching as to location of the mobile is seen. For relevant teachings as to one typical technique for an alternate technology scan, the Examiner is referred to Dennison’s Figure 2, which describes cell selection based on signal strength. While signal strength and location may be related, the claims explicitly recite a map stored in the mobile station.

Each independent claim is amended herein to more particularly describe the map that is stored in the mobile station. The map associates different geographic areas with different communication system selection parameters for at least one desired communication system. No combination of Tada or Otting is seen to teach or suggest such a map. To the map element the Office Action cites to Tada at col. 1, lines 40-44 and col. 2, lines 3-31. The former citation (Background section) recites that a vehicle trajectory of current positions is compared

with map data to compensate the vehicle's position and accurately display that position onto a road. No communication system selection parameter is seen to be disclosed, taught or suggested there. The latter citation (Summary section) details conditions as to whether to use a search selection device in the vehicle (mobile body) or in the information center IC. Selection of one search selection device or the other is subject to one or more of a plurality of conditions, of which Tada discloses the following:

- a) optimal route to destination (col. 2, lines 23-26);
- b) map version (col. 2, lines 55-58);
- c) map date (col. 2, lines 64-66);
- d) distance to destination (col. 3, lines 4-8);
- e) availability of the information center IC (col. 3, lines 18-20 and 31-37);
- f) receiving conditions of an electric wave from the IC (col. 3, lines 22-24);
- g) usage conditions of the communication section (col. 3, lines 44-46);
- h) past movement history of the vehicle (col. 3, lines 52-54 and 60-64); and
- i) cost (col. 4, lines 3-5).

No further conditions are seen within Tada.

Each of the above Tada conditions are seen to fail three elements of claim 1:

- None are a system selection parameter for a communication system that is associated with a geographic area;
- None are a system selection parameter by which a mobile station may obtain access to a desired communication system; and
- None are a system selection parameter by which a mobile station may wirelessly search for a desired communication system.

Obviousness would appear to require that a single one of the stated Tada conditions satisfy each of the above three elements of claim 1. Otting is cited against the second-listed element, but as noted above, the cited passage shows no system selection parameter, stored in the mobile station in a map, that may be used to obtain access to a communication system. Fumarolo does not appear relevant to these claim elements and is not cited as such in the

Office Action.

Of the above-recited Tada conditions, none are seen to associate the condition with a geographic area. Condition d) recites that for a route with a long distance to destination, the search may be divided into two portions. A first portion uses the mobile body searching device for roads near the current position and a search selection device may be selected for the second portion of the route. Tada does not detail whether the portions are parsed by distance, time, a specific map location, comparative accuracy or detail of the different maps, or any other criteria. Tada alludes that time is the criteria to distinguish the two route portions (roads near current position are needed quickly and the device should not establish communication, congestion information near current position is sufficiently obtained at the mobile body; col. 3, lines 8-14). Regardless, no communication occurs with the IC for the first portion of the route guidance, so at least for the first portion, condition d) is not a system selection parameter associated with a geographic area. For the second portion, condition d) does not specify which searching entity is selected or how. For the second portion then, Tada's condition d) appears to default to some other disclosed condition for choosing between the vehicle and the IC to obtain route guidance, so condition d) cannot be considered a system selection parameter for a communication system, whether or not associated with a geographic area. In the first portion, it may be considered a criteria NOT to search for route guidance at the IC and therefore not attempt to access a communication system (as Tada states explicitly), and in the second portion condition d) appears irrelevant. Further, distance to destination is not seen to satisfy either of the remaining elements of claim 1 listed above. It is not seen to be a parameter by which a mobile station may obtain access to a desired communication system, and it is not seen as a parameter by which a mobile station may wirelessly search for a desired communication system.

Of the remaining Tada conditions, e), f) and g) are seen as somewhat related to communications between the vehicle and the IC. Condition e) relates to selecting the vehicle search selection device when the IC is not operated [which the vehicle knows from *schedule* information (col. 3, lines 17-20)], or when it is predicted that the vehicle will lose

communications with the IC (col. 3, lines 31-43). In this condition, the *vehicle* search selection device is always and exclusively selected, so the condition e) is not a system selection parameter *for a communication system*, it is not a parameter by which a mobile station *may obtain access* to a communication system, and it is not a parameter by which a mobile station may *wirelessly search* for a communication system.

Condition f) relates to quality of the signal from the IC to the vehicle. As above, in this condition the *vehicle* search selection device is always and exclusively selected, not the IC. If the Examiner broadly considers this as a threshold signal level which, when exceeded, continues to select between the vehicle and the IC search selection devices, then such a threshold is incapable of being used to obtain access to a communication system or to wirelessly search for a communication system. Further, there appears no teaching in Tada or any other reference that condition f) is associated with geographic location. That weak signals are experienced at physically definable locations is insufficient, because claim 1 recites that the parameter be associated with a geographic area in a map stored in the mobile station. Tada is not seen to store a map that associates geographic areas with signal strength, and such a map's validity would appear short-lived anyway due to changing channel conditions.

Condition g) relates to whether a communication section is used for other communications so that communication with the IC is not possible. As with conditions e) and f) above [as well as the first route portion of condition d)], this condition selects always and exclusively the *vehicle* search selection device. Condition e) is neither associated with a geographic area, nor can it be used to obtain access to a desired communication system, nor can it be used for wirelessly searching for a desired communication system, each as recited in claim 1.

No other conditions other than those detailed above as a) through i) are seen in Tada. No condition a) through i) is seen to satisfy any of then three elements of claim 1 listed above. Independent claim 11 recites all three of those elements. Independent claims 21 and 27 recite the first two of those elements. Neither Otting nor Fumarolo are seen to provide teachings or suggestions that would cure the above shortfalls of Tada.

Respecting the dependent claims, the rejection to claim 23 is not understood. The Examiner asserts that Tada teaches a hierarchy of maps at col. 8, line 57 to col. 9, line 42. The Applicant disagrees. That portion of Tada teaches, consistent with the detailed argument above, that the conditions for a route search may be based on whether to set priority to highway, normal road, travel time, distance, or cost, as those priorities are input by a user (col. 8, lines 59-65). The search described at col. 9 with reference to Figure 3 relates to multiple searches of the same map (or multiple parallel searches of the vehicle map and of the IC map). Nowhere is there seen a hierarchy of maps as in claim 23, "where a map that is lower in the hierarchy provides more a detailed system selection parameter than a map higher in the hierarchy". The Applicant does not understand how the multiple search conditions of the cited Tada passage teach or suggest a hierarchy of maps. Searching any database with more than a single search criteria is not seen to convert the database into a hierarchy of different databases. Even assuming *arguendo* that Tada did teach or suggest a hierarchy of maps, there appears to be no association of system selection parameters as in claim 23, or even conditions as Tada describes, that is *provided* by any Tada map. In Tada, it is the conditions that are used to *search* the map, whereas in claim 23 it is the map that provides detailed system selection parameters. The Office Action's characterization of the reference appears to misunderstand the claim.

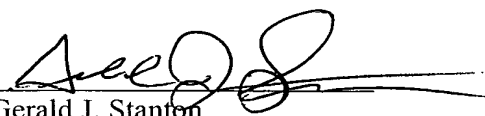
Dennison is also asserted at col. 12 line 15 to col. 13 line 20 and col. 16 lines 1-33 against other dependent claims for teaching selecting a desired frequency band to establish communications based on the exact geographic location of a mobile communication device. Dennison is directed to call management decisions, such as billing and taxing decisions, cell site selection, frequency selection, and even cellular system selection based on the exact geographic location of a mobile unit. (Dennison, abstract.) Dennison is seen in all instances to store any association of frequency with geographic location in the network, not in the mobile unit. See for example col. 12, lines 56-63. The frequency selection block 124 of that passage is seen as directly related to the need described at col. 6, lines 24-28, where frequencies are changed so that a single wireless service provider can provide service to its

subscribers as mobile units move. These are generally seen as handovers between base stations, and Dennison is not seen to teach associating *in the mobile unit* frequencies with geographic boundaries, but rather storing that information *in the network* and determining from the mobile unit's position which base station and frequency to hand it off to while moving. Clearly, the billing and taxing information recited alongside the frequencies would have no relevance to the mobile unit, but only to the network/service provider that submits billing information to the subscriber and that pays taxes based on the mobile unit's usage of its resources. While Dennison discloses determining an exact geographic location of a mobile station, it does not teach or suggest storing *in the mobile unit* an association of a geographic area with a band of frequencies (claims 2 and 12), a frequency channel (claims 3 and 13), or a protocol to be used (claims 4 and 14).

The added claims are seen to recite an even further distinction over any combination of references. No reference is seen to teach or suggest storing in the mobile station a map that associates at least one system selection parameter for each of at least two communication systems in an overlapping geographic area as in claims 32-35.

The above detailed remarks, especially in light of the amended claims, are seen to address and overcome the rejections cited in the referenced Office Action. The Examiner is respectfully requested to consider the amended claims and the above remarks, and issue a timely notification of the allowance of claims 1-36. The undersigned welcomes the opportunity to resolve any remaining matters, or to clarify any of the above remarks that may be unclear, via teleconference at the Examiner's discretion.

Respectfully submitted:


Gerald J. Stanton
Reg. No.: 46,008

October 19, 2005
Date

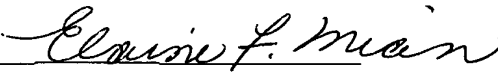
Appl. No. 09/894,046
Amendment dated October 19, 2005
Reply to Office Action dated July 29, 2005

Customer No.: 29683
HARRINGTON & SMITH, LLP
4 Research Drive
Shelton, CT 06484-6212
Phone: (203) 925-9400
Facsimile: (203) 944-0245
Email: gstanton@hspatent.com

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

October 19, 2005
Date


Name of Person Making Deposit